FACT SHEET

L-1037

# HOW TO TRANSPLANT WOODY PLANTS

William D. Adams*

Trees and shrubs are essential to a pleasant home environment. If they fit into a well planned landscape, they greatly increase the value of your home.

Before purchasing the first tree or shrub, investigate its ultimate size and cultural requirements. Far too often, a tree is planted where it soon becomes too large. Some plants require special soil preparation while others may demand planting in full sun or shade. Occasionally, plants are used which will not adapt to the area regardless of the special care you give them.

Information on plants which are hard to adapt is available from your county agricultural agent or local nurseryman. A number of excellent publications have been written on the subject.

When you know the plant and know where to place it in the landscape, proper planting is your next concern.

### Planting Bare-Root Plants

When planting bare-root trees and shrubs, dig a hole large enough to allow the root system to spread naturally. It is not necessary, however, to dig the hole much larger.

Do not allow the roots to dry out. If you plan to plant within the next 24 hours, it is a good idea to soak the roots in a pail of water during this time. If it will be several days before you plant, dig a shallow trench and "heel in" the plants. See figure 1.

Before planting, cut back any broken or damaged roots. Mound good topsoil in the bottom of the hole to form a cone on which to spread the root system as it grew in the nursery, figure 2.

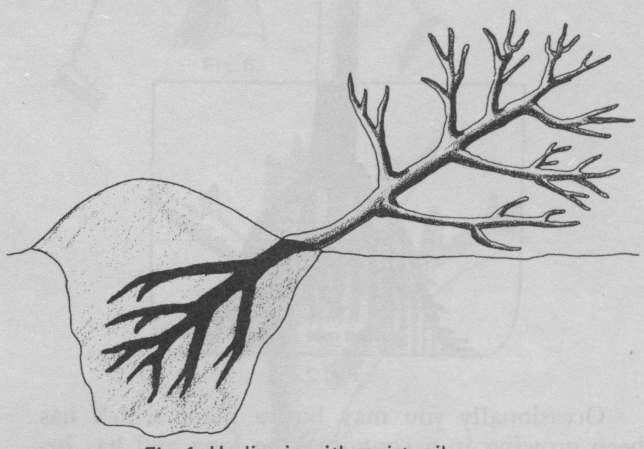

Fig. 1. Heeling in with moist soil

Backfill the hole three-fourths full with soil worked firmly around the root system with your fingers to eliminate air pockets. Fill the hole with water and let settle. This should eliminate any remaining air pockets. Finally, add the remaining top soil. Unless the topsoil is very deep, it may be advantageous to add organic matter about one-third by volume to the soil used as backfill. Watering can be facilitated by creating a watering basin with the extra soil mix. In areas of high rainfall and poor drainage, the watering basin may cause more problems than it is worth.

### Planting B & B or Canned Nursery Stock

Balled and burlapped plants, as well as those grown in containers, have a distinct advantage over bare-root plants by having a relatively undisturbed root system. If this advantage is to be retained, use care to avoid breaking or damaging the root ball. Most nursery stock of this type can be planted anytime of the year.

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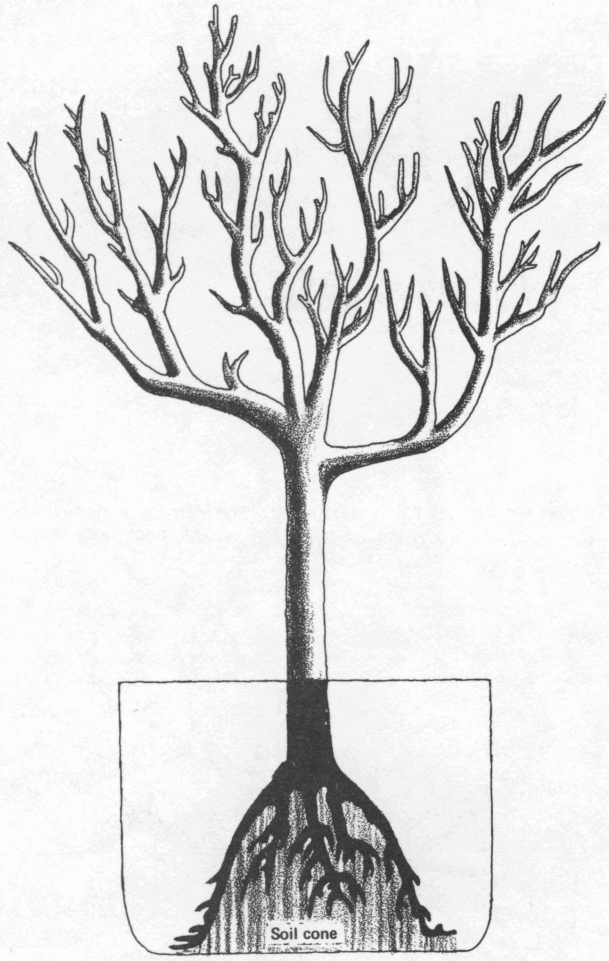


Fig. 2.

Occasionally you may buy a plant which has been growing in a container too long and has become root bound. This condition is characterized by a mass of roots spiraled around the bottom and sides of the container and usually growing out of the drainage holes. In addition, the plant usually appears stunted. Begin by thoroughly soaking the root ball. Let it stand several hours in a pan of water or completely immerse it for about 15 minutes. Unless you pry and loosen this root mass or cut some roots, the plant will probably never outgrow this condition. If you have to damage or remove part of the root system, you will need to compensate by pruning off about one-third of the top growth.

Dig the hole no deeper than is necessary to set the plant at its original soil level or slightly higher (1 to 2 inches) and 12 to 18 inches wider than the root ball. When planting in a sandy soil, save the topsoil and mix it 1:1 with organic matter such as peat moss, pine bark or compost. Utilize this mixture to backfill the hole.

If the soil is a tight clay, backfill with the original clay topsoil. Organic matter may be mixed with this but particularly in areas of high rainfall and poor drainage, reserve this mixture for the final one-third of backfill. Firm the soil but do not tamp, particularly in tight clay.

With the hole three-fourths full, water thoroughly to settle the soil around the roots. A root starter may be used but it is not absolutely necessary.

In a state with as many variable conditions of soil, climate and topography as Texas, it is difficult to give general instructions without mentioning exceptions. Some of these are described below:

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|---|---|
| **Time of year** | **summer—may need watering basin, even along Gulf Coast.**<br>**winter — knock down any watering basin if season is rainy and drainage is poor.** |
| **Type of plant** | **Some plants such as willow, bald cypress and other wetland species will tolerate poor drainage. Others such as roses, camellias and pecans require special planting techniques. Information is available from your county agricultural agent's office on the cultural requirements of these plants.** |
| **Topography** | **If plants are on a definite slope, drainage is not a problem even with tight soil and high rainfall.** |
| **Climate** | **Areas of low rainfall definitely need a watering basin plus the addition of more organic matter to help hold moisture. This is particularly true where this condition is combined with poor soil.** |

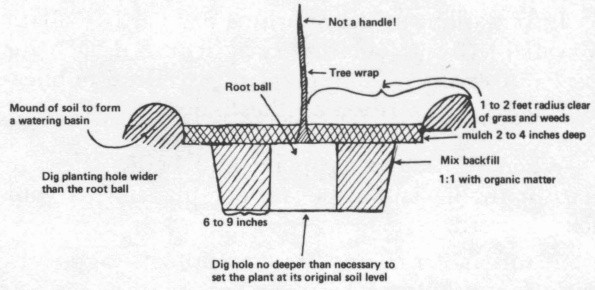


Fig. 3. Planting in sandy, well-drained soils or in low rainfall areas

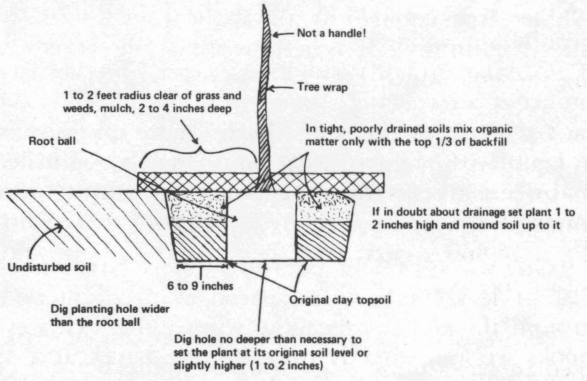


Fig. 4. Planting in clay or poorly drained soils in areas of high rainfall

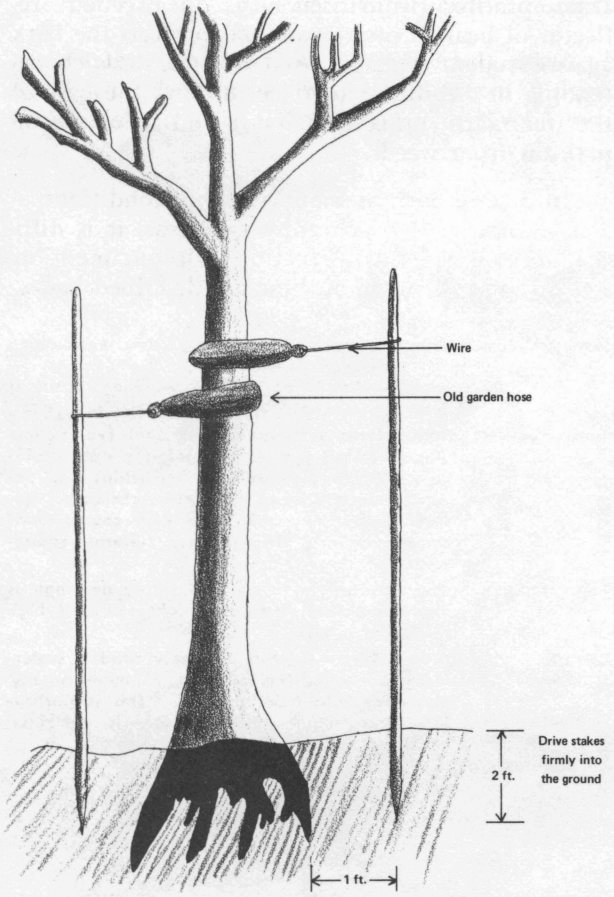


Fig. 5. Suitable for light to medium branched trees up to 20 feet

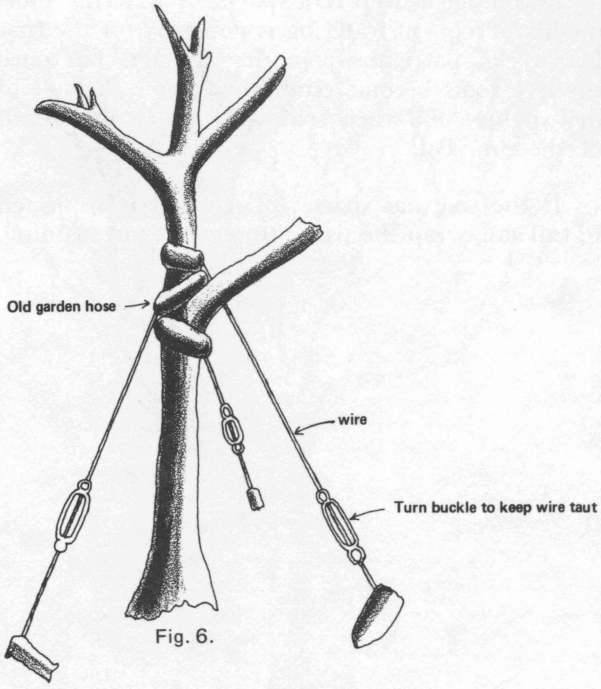


Fig. 6.

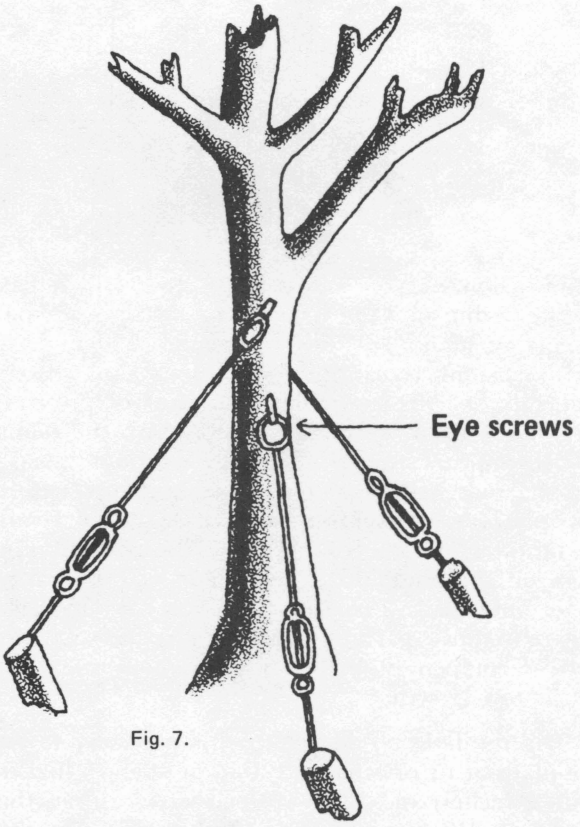


Fig. 7.

Plants larger than 4 feet require staking or guy wiring, particularly if growing in an area exposed to frequent winds.

Trees up to 20 feet may be supported with one to two strong stakes driven several feet into the ground approximately a foot away from the trunk. The stake should extend at least to the first branches after being driven into the ground. Attach the tree to the stakes with a wire enclosed in a length of old garden hose. Heavily branched and dense trees within this size range may require guying.

Guy wires must be used to support larger trees. Use at least three wires spaced at even intervals around the tree. Attach the wires either with eye hooks screwed directly into the tree trunk at a 45 degree angle or with wire loops. If the tree is less than 2 inches in diameter, use wire loops. Be sure to protect the bark from abrasion by enclosing the wire where it circles the tree in a length of old garden hose. If eye hooks are used, space them at least 3 inches apart, vertically, to avoid splitting the trunk. Keep wires taut by occasionally readjusting the tension.

Encourage a deep root system by watering thoroughly. Frequent watering is necessary for the first few weeks, particularly in the summer, but once the tree roots become established allow the soil to dry slightly and then soak at least to the depth of the root ball.

If the tree has sparse foliage and is subjected to full sun, wrap the trunk to prevent sun scalding. Special tree wrap paper is available from most garden centers; however, strips of burlap also can be used to shade the trunk. Another material is aluminum foil which serves as an excellent reflector of heat, is easy to use and protects the bark against rodent damage. A 3 to 4-inch mulch extending in a radius 1 to 2 feet around the base of the tree helps conserve moisture and reduces competition from weeds.

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